Station Instruction Cards

....

Station 1 (Fires)

1. Put on your goggles.
2. Light the candle.
3. Cover the candle with a drinking glass or jar.
4. Observe what happens.
5. Record your observations.
6. Take off your goggles. Leave the materials for the next team of students.

....

Station 2 (Droughts)

1. Compare the temperature of the two set-ups you see (the shaded cup of soil and the unshaded cup of soil).
2. Record your observations.

....

Station 3 (Floods)

1. Pick up the container of water at the station
2. Use the water to fill the river as it would be without a flood.
3. Add enough water to flood the "land" closest to the river.
4. Add enough water to flood the land higher above the river.
5. Empty the water back into the original container.
6. Answer the question, "During a real flood, what would cause the water level to go back down?"

....

Station 4 (Hurricanes)

1. Make sure the psychrometer station is set up as shown below.

Note: A psychrometer has two thermometers—one wet thermometer with a wick and one dry thermometer.
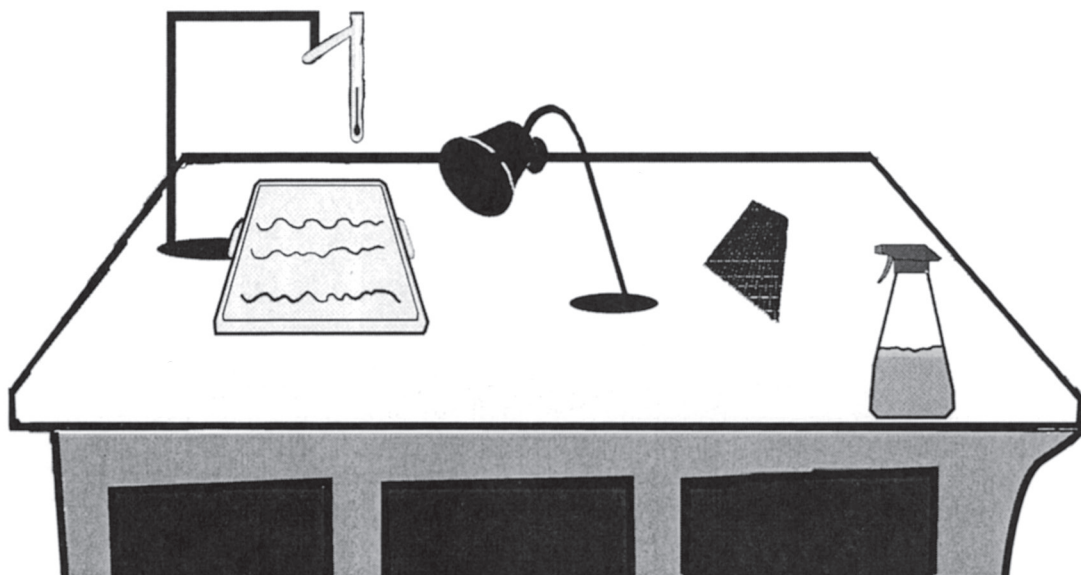
a. Moisten the wet-bulb wick of the psychrometer using a spray bottle of water.

b. Check to be sure there is water in the cookie sheet.

c. Check to be sure the heat lamp is on and is situated so that it is heating the water in the cookie sheet and the air above the cookie sheet.

CAUTION The heat lamp will be very hot and could cause burns. Be careful not to spill water near the heat lamp.

2. Fan the air above the cookie sheet and near the psychrometer.

3. Record the temperature of each thermometer. What is the difference?

4. Use the calibration chart to determine the amount of water vapor in the air (the relative humidity).

Station 5 (Tornadoes)

1. Check the tube between the bottles. Make sure the water cannot leak out when the bottle is tilted to the side.

2. Turn the bottle with water in it upside down so water falls into the lower bottle.

3. Swirl the bottles rapidly.

4. Describe your observations in your technology notebook. How is this simulation like a tornado and how is it different?

Responding to Patterns of Change

When Natural Events Become Natural Disasters